

AMENDMENTS TO THE CLAIMS:

1-22. (canceled)

23. (currently amended) An antibody-producing cell line that produces an a monoclonal antibody that binds specifically to an oligopeptide of claim 1 or claim 12 a purified oligopeptide having the amino acid sequence LQLQPFPQPQLPYPQPQLPYPQPQLPYPQPQPF (SEQ ID NO:12).

24. (original) An antibody produced from the cell line of claim 23.

25-28. (canceled)

29. (currently amended) The antibody of Claim 24, wherein the antibody is generated against and binds specifically to an oligopeptide selected from the group consisting of (SEQ ID NO:12) LQLQPFPQPQLPYPQPQLPYPQPQLPYPQPQPF, a deamidated counterpart oligopeptide of SEQ ID NO:12, a conjugate of tissue transglutaminase and SEQ ID NO:12, and or a conjugate of tissue transglutaminase and said counterpart oligonucleotide.

30 (new) An antibody-producing cell line that was generated by a response to a purified oligopeptide having the amino acid sequence LQLQPFPQPQLPYPQPQLPYPQPQLPYPQPQPF (SEQ ID NO:12), and which produces a monoclonal antibody that binds specifically to a purified oligopeptide having the amino acid sequence LQLQPFPQPQLPYPQPQLPYPQPQLPYPQPQPF (SEQ ID NO:12).

31. (new) An antibody produced by the cell line of Claim 30.

32. (new) An antibody that binds specifically to an antigen selected from (SEQ ID NO:12) LQLQPFPQPQLPYPQPQLPYPQPQLPYPQPQPF; a deamidated counterpart oligopeptide of SEQ ID NO:12; a conjugate of tissue transglutaminase and SEQ ID NO:12; or a conjugate of tissue transglutaminase and said counterpart oligonucleotide.

33. (new) The antibody of Claim 32, wherein the antibody is a polyclonal antibody.

34. (new) The antibody of Claim 32, wherein the antibody is a monoclonal antibody.

35. (new) The antibody of Claim 32, wherein the antibody is produced by a cell line generated by a response to a deamidated counterpart oligopeptide of SEQ ID NO:12.

36. (new) The antibody of Claim 32, wherein the antibody is produced by a cell line generated by a response to a conjugate of tissue transglutaminase and SEQ ID NO:12.

37. (new) The antibody of Claim 32, wherein the antibody is produced by a cell line generated by a response to a conjugate of tissue transglutaminase and a deamidated counterpart oligopeptide of SEQ ID NO:12.

38. (new) An antibody producing cell line that was generated by an immune response to an antigen selected from (SEQ ID NO:12) LQLQPFPQPQLPYPQPQLPYPQPQLPYPQPQPF; a deamidated counterpart oligopeptide of SEQ ID NO:12; a conjugate of tissue transglutaminase and SEQ ID NO:12; or a conjugate of tissue transglutaminase and said counterpart oligonucleotide.